- 1. A composition comprising a solution for intraocular administration containing a concentration in the range between about 1 ng/ml to about 200  $\mu$ g/ml of at least one of a macrolide antibiotic or mycophenolic acid as a substitute for an ocular or operative fluid.
- 2. The composition of claim 1 wherein the macrolide antibiotic is at a concentration of about 1  $\mu g/ml$ .
- 3. The composition of claim 1 wherein the macrolide antibiotic is at a concentration in the range of about 1  $\mu$ g/ml to about 20  $\mu$ g/ml.
- 4. The composition of claim 1 wherein the macrolide antibiotic is at a concentration in the range of about 20  $\mu$ g/ml to about 200  $\mu$ g/ml.
- 5. The composition of claim 1 wherein the solution is selected from at least one of an irrigation solution, a volume replacement solution, and a wash solution.
- 6. The composition of claim 1 wherein the macrolide antibiotic is at least one of tacrolimus, cyclosporine, sirolimus, everolimus, ascomycin, erythromycin, azithromycin, clarithromycin, clindamycin, lincomycin, dirithromycin, josamycin, spiramycin, diacetyl-midecamycin,
- 5 tylosin, roxithromycin, ABT-773, telithromycin, leucomycins, and lincosamide.

- 7. The composition of claim 1 wherein the macrolide antibiotic or mycophenolic acid is formulated as at least one of a microcapsule, a microsphere, a microvesicle, and a liposome.
- 8. The composition of claim 1 wherein the macrolide antibiotic or mycophenolic acid is provided to a prepared ocular solution.
- 9. The composition of claim 1 wherein the macrolide antibiotic or mycophenolic acid is provided in formulating an ocular solution.

- 10. A therapeutic method comprising providing to an eye of a patient an ocular solution containing at least one of a macrolide antibiotic or mycophenolic acid at a concentration in the range between about 1 ng/ml to about 200  $\mu$ g/ml to provide a therapeutic effect.
- 11. The method of claim 10 wherein the macrolide antibiotic or mycophenolic acid provides at least one of an anti-inflammatory effect, an anti-cell proliferation effect, an anti-cell migration effect, an anti-angiogenesis effect, an antimicrobial effect, and an antifungal effect.
- 12. The method of claim 10 wherein the macrolide antibiotic or mycophenolic acid provides an anti-inflammatory effect without increased intraocular pressure.
- 13. The method of claim 10 wherein the macrolide antibiotic or mycophenolic acid provides an anti-angiogenic effect in a patient with an ocular tumor, a patient with diabetes, or a patient with sickle cell anemia.
- 14. The method of claim 10 wherein the macrolide antibiotic or mycophenolic acid is at a concentration of about 1 μg/ml.
- 15. The method of claim 10 wherein the macrolide antibiotic or mycophenolic acid is at a concentration ranging from about 1 ng/ml to about 20 μg/ml.

16. The method of claim 10 wherein the macrolide antibiotic or mycophenolic acid is at a concentration ranging from about 20  $\mu$ g/ml to about 200  $\mu$ g/ml.

- 17. A therapeutic method comprising intraocularly administering to a patient undergoing cataract surgery an ocular solution containing at least one of a macrolide antibiotic or mycophenolic acid at a concentration in the range from about 20 μg/ml to about 200 μg/ml within a lens capsule prior to insertion of a replacement intraocular lens.
  - 18. The method of claim 17 wherein the solution reduces opacification of the posterior capsule.
  - 19. The method of claim 17 wherein the macrolide antibiotic is formulated as at least one of a liposome, a macrosphere, a microsphere, a macrocapsule, a microcapsule, a macrovesicle, and a microvesicle.
  - 20. The method of claim 17 wherein the macrolide antibiotic or mycophenolic acid is at a concentration in the range of about 20  $\mu$ g/ml to about 200  $\mu$ g/ml.
  - 21. The method of claim 19 wherein the macrolide antibiotic or mycophenolic acid is implanted within the capsule.

- 22. An article comprising an implantable ocular replacement lens in a solution containing a concentration of a macrolide antibiotic or mycophenolic acid sufficient to provide the lens with at least one effect selected from anti-cell proliferation, anti-cell migration, anti-inflammatory, anti-angiogenesis, antimicrobial, and antifungal.
  - 23. The article of claim 22 wherein the concentration is in the range between about 20  $\mu$ g/ml to about 2000  $\mu$ g/ml.
  - 24. The article of claim 22 wherein the concentration is the range between about 20  $\mu$ g/ml to about 200  $\mu$ g/ml.
  - 25. The article of claim 22 wherein the macrolide antibiotic is at least one of tacrolimus, cyclosporine, sirolimus, everolimus, ascomycin, erythromycin, azithromycin, clarithromycin, clindamycin, lincomycin, dirithromycin, josamycin, spiramycin, diacetyl-midecamycin, tylosin, roxithromycin, ABT-773, telithromycin, leucomycins, and lincosamide.

5

- 26. An article comprising an implantable ocular replacement lens containing at least one macrolide antibiotic or mycophenolic acid.
- 27. The article of claim 26 wherein the antibiotic or mycophenolic acid is in a solution in which the lens is contained.
- 28. The article of claim 26 wherein the lens is a porous hydrogel and the antibiotic or mycophenolic acid is within the pores of the hydrogel lens.
- 29. The article of claim 26 wherein the antibiotic or mycophenolic acid is in a coating on at least one lens surface.
- 30. The article of claim 26 wherein the lens is implanted in a lens capsule and the implanted lens releases the antibiotic or mycophenolic acid in the lens capsule.
- 31. The article of claim 26 wherein the macrolide antibiotic is at least one of tacrolimus, cyclosporine, sirolimus, everolimus, ascomycin, erythromycin, azithromycin, clarithromycin, clindamycin, lincomycin, dirithromycin, josamycin, spiramycin, diacetyl-midecamycin, tylosin, roxithromycin, ABT-773, telithromycin, leucomycins, and lincosamide.

5

- 32. An article comprising an implantable ocular lens in an opthalmically acceptable medium, the medium further comprising an effective anti-cell proliferative or anti-cell migratory concentration of at least one macrolide antibiotic or mycophenolic acid.
- 33. The article of claim 32 wherein the concentration is in the range between about 20  $\mu g/ml$  to about 2000  $\mu g/ml$ .
- 34. The article of claim 32 wherein the concentration is in the range between about 200  $\mu$ g/ml to about 2000  $\mu$ g/ml.
- 35. The article of claim 32 wherein the concentration is in the range between about 20  $\mu$ g/ml to about 200  $\mu$ g/ml.
- 36. The article of claim 32 wherein the macrolide antibiotic is at least one of tacrolimus, cyclosporine, sirolimus, everolimus, ascomycin, erythromycin, azithromycin, clarithromycin, clindamycin, lincomycin, dirithromycin, josamycin, spiramycin, diacetyl-midecamycin, tylosin, roxithromycin, ABT-773, telithromycin, leucomycins, and lincosamide.

5